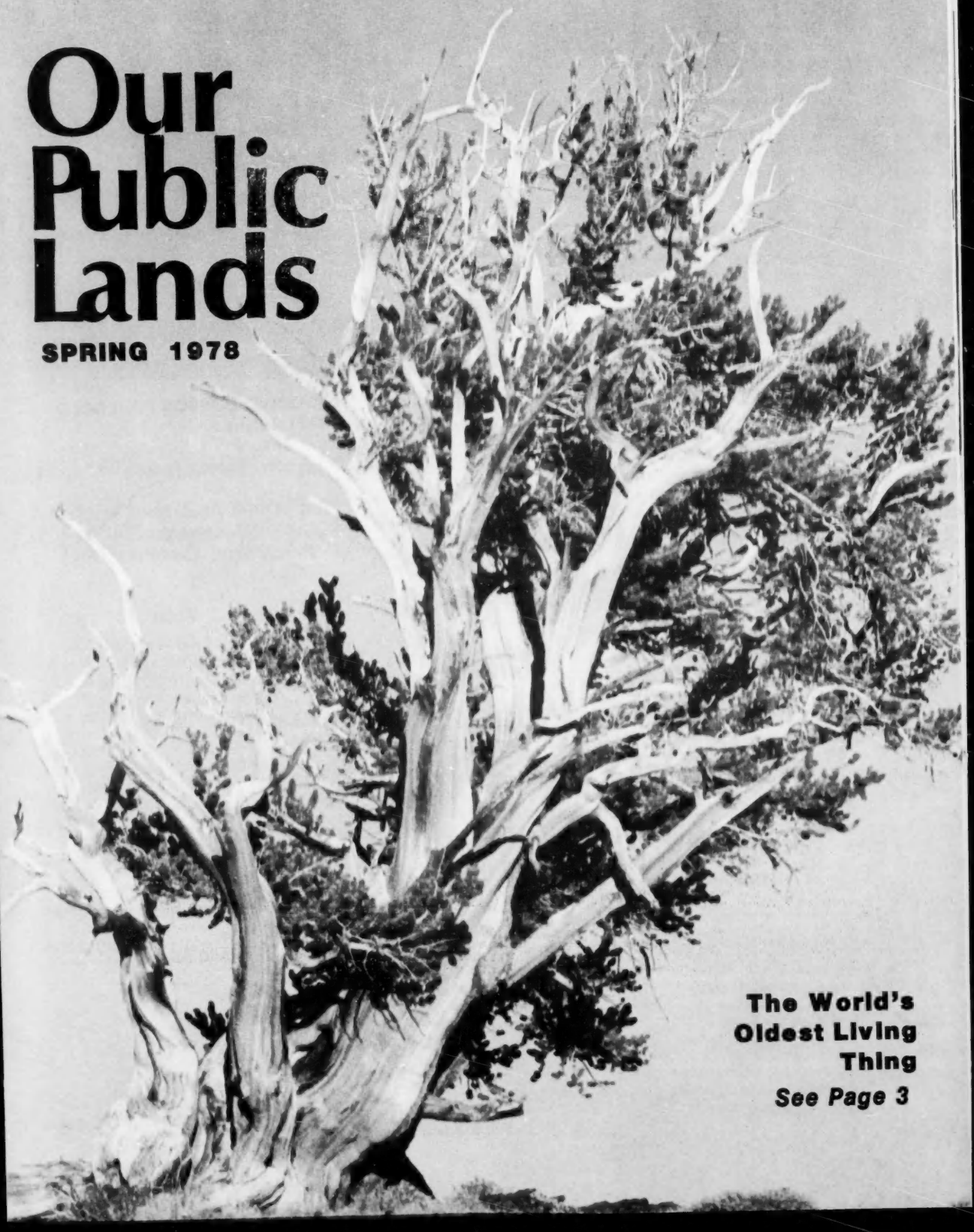
Our Public Lands

SPRING 1978



The World's Oldest Living Thing

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SPRING 1978
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Our Public Lands

U.S. DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources."

The Department works to assure the wisest choice in managing all our resources so each will make its full contribution to a better United States — now and in the future.

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Paul C. Herndon, Editor

Philip E. Kromas, Art Director

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High in the Sierra Nevada Mountains the Bristle Cone Pine is...

The World's Oldest Living Thing

Perhaps it is because we yearn for immortality that we are fascinated by things that are old. Great antiquity was not given to man, but he was given an inquiring mind and the intellect to unravel the secrets of nature. So it is no surprise that we not only ask "What is the oldest living thing in the world?" but that we know the answer.

Most people would not be surprised to learn that the oldest living thing is a tree. The giant Sequoias and stately Redwoods are obviously very old. But there is a tree that is even older. It is the Bristle Cone Pine that grows on public lands and other land in the west.

In size, the bristle cone is no match for either the Sequoia or the Redwood; a 60 foot specimen is a champ. But if no match in size, this ancient tree is the equal of any tree in beauty. Yet, its beauty is not conventional. Like a gargoyle resting on the ledge of some old-world temple, it's so ugly, it's beautiful. And like the most striking women, its form and grace must be studied to be appreciated — but once appreciated, it can never be forgotten.

The oldest known bristle cone is found on the Humboldt National Forest. It is 4,900 years old. The oldest Sequoia is a mere 3,800. Four thousand nine hundred years translates into a tree that was a seedling at the time the ancient Britons were building Stonehenge, and had weathered the elements for 3,000 years when Caesar's legions were invading England.

In its fight to stay alive, the bristle cone has adapted to a harsh environment. It can thrive in high altitudes where it has little competition from other trees and where man is apt to be only a casual visitor. It needs a minimum of soil to nourish it.

During dry seasons it becomes dormant, and grows only a small bit, but once the rains come, it is capable of reviving and growing with a spurt of vitality. Since it is not large nor of great bulk, it survives when winds blow down larger trees.

As a bristle cone grows, it also dies. The average tree is a weird mixture of living and dead tissues, and the living foliage needs only a slender thread of live bark to keep growing.

The name "bristle cone" comes from the stiff curved bristles that guard the 3 to 3½ inch cones. These cones are slightly curved and a deep chocolate brown when fully mature. The needles of the tree are a deep green and grow in clusters of five.

Besides being a curosity, the bristle cone pine provides us with a link to the past that scientists find valuable in many ways. Since a tree grows faster in years when there is plenty of rainfall, its tree-ring pattern provides a graphic record of the weather cycles that have occurred during the lifetime of the tree. This, in turn, helps meterologists predict future weather patterns, and can also provide valuable clues as to why ancient tribes migrated or behaved in other ways.

The oldest bristle cone pine found on BLM land is 3,000 years old, and lands have been set aside near Ely, Nevada to peserve major stands of these trees.

The ancient age of the Bristle Cones is universally accepted, but we cannot know their future. Does a bristle cone ever die of old age? We don't know. It is within the realm of possibility that these tough old trees will be around to monitor the comings and goings of our descendents for generations to come.

Once a Barrier to Western Travel, Utah's Unique Salt Flats Became the Testing Ground for High Speed Vehicles.

The Bonneville Salt Flats

The Bonneville Salt Flats is one of the public domain's most dramatic features. The east-bound traveler who crosses over Observation Point, soon reaches a point in the road where suddenly the Flats glare with startling whiteness and stretch away to the horizon. If it is the traveler's first visit, the effect of the view can hardly be overstated. Today the Flats may be the highlight of a journey over Interstate 80 between the Nevada line and Salt Lake City, or vice versa, but not so many years ago it was a place the traveler avoided — a place where nothing lived and a bit of carelessness could cost the traveler the loss of his livestock and even his own life as he tried to reach more hospitable country beyond. Little could those early pioneers imagine that within less than one hundred years men would travel across the Salt Flats at speeds in excess of 600 miles an hour.

Most of the Salt Flats (30,200 acres) north of Interstate 80 are on public land, and are a part of the heritage of all Americans. Altogether, the area measures 44,-000 acres. Besides the lands administered by the Bueau of Land Management, the Flats are owned by the State of Utah and by the Kaiser Aluminum and Chemical Corporation.

Like the Great Salt Lake, the Flats are what is left of prehistoric Lake Bonneville. Lake Bonneville is the name given to an inland sea that once covered about one third of what is now the State of Utah. Because of climatic and geographic changes, the lake slowly dried up leaving as a remnant the present Great Salt Lake and the residue of salt that makes up the Flats.

Lake Bonneville, and the salt flat it left behind, were named for Captain B. L. E. Bonneville, an early military explorer and fur trader who traveled extensively through the west during the first half of the 19th century. Ironically, he never saw either the Great Lake or the Flats that bear his name.

One geologist has described the Flats as similar to a flat piece of ice floating in a sea of soft mud. The analogy becomes painfully clear to visitors when they drive off the raft of salt and become mired in the soft mud that is found around the fringes of the salt.

"Salt" is a term used for a family of chemical compounds. Besides the familiar sodium chloride used on the table, salt can also refer to compounds of potassium, magnesium and lithium as well as

GEOFFERY MIDDAUGH

Mr. Middaugh wrote this story while working as a Outdoor Recreation Planner in BLM's Salt Lake District Office. He has since transferred to the Bureau's ElCentro, California Area Office.

other metallic elements. All four of the compounds named above are found on the flats and each contributes in some way to make the surface of the Flats smooth and hard.

The surface is so flat that water does not readily drain. During winter and early spring rain may accumulate to a depth of a few inches so that water stands over the entire area until the higher temperatures of approaching summer causes it to evaporate.

The wind blowing this layer of standing water smooths the salt until it is almost perfectly flat. It is, in fact, so flat that this is the only place in the United States where one can see the curvature of the earth as he looks toward the horizon.

Historically the Flats have been a barrier to westward travel. In 1826 Jedediah Smith led the first party of white men across the area. The stories he and his men told about their hardships were so well heeded by travelers that there was not another attempt at crossing until 1845.

In that year John Charles Fremont and his party made a rigerous two-day march across the Flats. They barely made it and their stories of suffering added to the areas bad reputation.

Then came Lansford Hastings, a brash adventurer who had ambitions to become a leader among the west-bound emigrants. In 1842 he had been elected captain of a wagon train bound for California and found the honor exhilarating. With soaring ambitions, he made a return trip from California to Missouri, and in 1845 published a book, the "Emigrant Guide to Oregon and California." In that book, presumably based on his experience, he advocated a shorter route to California. According to Hastings, rather than make the northward loop from Jim Bridger's Trading Post through Fort Hall and then south along the Raft River to the Humbolt River, travelers should, instead, head due west from Bridger's Post.

The fastest cars in the world line up for their turn racing the clock. In each case the next car to run is towed to the starting line by another vehicle.

On the map, this suggestion made good sense. The Fort Hall loop had always irritated California-bound travelers since it took them better than a hundred miles further than the more direct route to the Humbolt as recommended by Hastings.

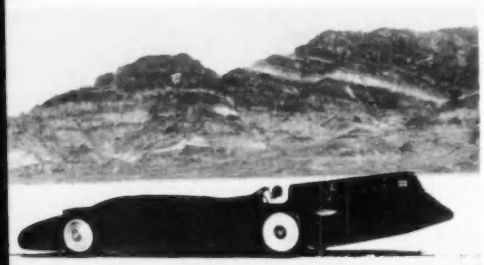
But Hastings was an irresponsible trail blazer. Although he had traveled the route he later recommended, he had made the trip on horseback — a far cry from traveling the same trail in a wagon. Not only would the cumbersome, slower-moving wagons have to cross the Salt Flats in mid August, but would also lose precious time in finding a way through the rugged Wasatch Mountains east of the Great Salt Lake.

The more experienced mountain men who guided the wagon trains understood the dangers of the shorter route and for a time Hastings advice was ignored, but in 1846, despite the warnings of experienced men like James Clyman, the Donnor-Reed party elected to take the short cut on the strength of Hastings' book.

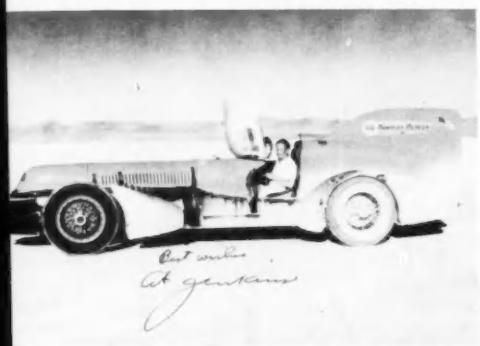
After losing time trying to find a way through the mountains, the party took 4 days to cross the salt flats losing both animals and wagons along the way.

They reached the opposite side without loss of life, but they had lost so much time and so many irreplacable animals that they reached the foot of the Sierra Nevada Mountains too late to make a crossing before snow blocked the high mountain passes. Their situation was more serious than they realized. They camped at the foot of the mountains to wait for Spring. Then during a terrible winter almost half of the party starved to death. Thus the Salt Flats had a direct bearing on what has become the best known tragedy of the California Trail.

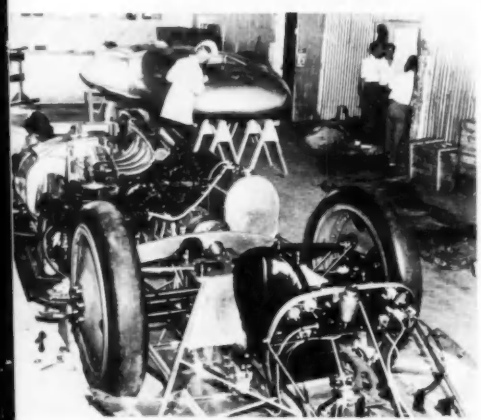
The experience of the Donnor Party so firmly established the bad reputation of the Salt Flats that east-west travelers avoided it



Sir Malcolm Campbell's Bluebird once set world speed records here at the Flats.
Photograph copyrighted by the Salt Lake City Chamber of Commerce



In 1940 Ab Jenkins set 81 new speed records with his Mormon Meteor III
Photograph copyrighted by the Utah Historical Society.



In 1947 John Cobb's Railton Special broke the world's speed record for a mile when he was clocked at 394 miles per hour.
Photograph copyrighted by Utah State Historical Society

for years. The Pony Express routed their riders out of Salt Lake City to the south, the first transcontinental railroad skirted it to the north, and telegraph lines passed both to the north and to the south.

The Flats were finally penetrated in the early 1900s. George Gould, son of the famous railroad tycoon Jay Gould, saw the need of a railroad between Salt Lake City and San Francisco. His overall objective was to establish a transcontinental system under the direction of a single company. When other railroads refused to cooperate, Gould set out on his own.

Gould's route ran directly west from Salt Lake City and through the heart of the Salt Flats. Construction took 3 years, from 1906 to 1909, and passenger service was started in 1910. This railroad, which became the Western Pacific, was the first permanent route across the Flats.

In 1914 there was another and more subtle penetration of the Salt Flats. By this time the telephone was starting to replace the telegraph, and the last link in a coast to coast hook-up was a 600 mile stretch between Wyoming and western Nevada. The most direct route was across the Flats. That proved to be a difficult segment to build.

Wind, harsh winter and the heat of summer plagued both men and animals. Their discomfort was made more accute by the glare of sunlight off the snow white salt. It is said that while the crews crossed the Flats, even the horses wore dark glasses.

But despite the hardships, a ceremony called "the Wedding of the Wires" was held in Wendover, Utah on June 17, 1914. Thereafter the sound of the human voice could be transmitted from the Atlantic to the Pacific in speeds approaching the speed of light.

The invention of the automobile meant that men could travel distances in hours that would have taken days by wagon or horseback. The only barrier to the fullest utilization of the automobile was the lack of adequate roads. The dim trails that had accomodated the wagon were not good enough for cars. Along with the automobile came a demand for a transcontinental highway.

Utah officials proposed a "Victory Highway" that would parallel the railroad across the Flats and connect Salt Lake City with San Francisco. The proposal touched off a controversy with proponents of a proposed "Lincoln Highway" that was planned to end in Los Angeles. Naturally, both California cities wanted to be the terminus of any transcontinental highway that might be built. The controversy was resolved when both highways were built.

The highway across the Flats was completed in 1925, but not without difficulties. The road, built on top of the hard salt, acted as a dike. Water, blown by the wind, accumulated against the road. The accumulated water would then disolve the salt and undermine the roadbed. This required costly repairs. The problem was solved when cutoff ditches were built that channeled the water away from the roadbed and prevented further damage. This Highway was to become U.S. 40 and eventually Interstate 80.

With the construction of the highway, the Salt Flats were no longer a barrier to travel. The speed of the automobile precluded the problems of thirst and exposure that had so plagued the pioneers, and now that the Flats were conquored by speed, men became preoccupied with speed itself.

The challenge to "go faster" was in man's blood and the challenge to go faster than any other human being had ever traveled was a goal that lured some with a magnetism as strong as the lure of gold. It soon became apparent that the vast expanse of hard smooth surface afforded on the Flats was ideal for high speed driving.

The first man to recognize the potential of the Salt Flats as a race course was W. D. Rishel. He "discovered" the Flats while charting a course for a New York to San Francisco bicycle race in 1896. Being a promoter, he immediately

recognized the area's potential as a race course for the new "horseless carriages" that were becoming popular.

Rishel's cross-country bicycle race never came off, but he remembered the Salt Flats. Eleven years later he visited the area to try out a new Pierce Arrow. He was disappointed to find the Flat's covered with water. Being persistent he returned in 1911. This time he had convinced Ferg Johnson to bring his Packard to the Salt Flats. After zipping around the area in Johnson's car, both men were convinced that the Flats were well suited to setting land speed records.

The word spread slowly among other racing enthusiasts. In 1914 Teddy Tetzlaff set an unofficial world record of 141.73 miles per hour in his Bleitzen Benz, and the Bonneville Salt Flats was well on its way to become a world-famous speed course.

Others followed Tetzlaff. The most noted of the Bonneville racers was Ab Jenkins. Jenkins had been born and raised in Salt Lake City. Racing was his life's interest. Jenkins, who later became mayor of Salt Lake City, is credited with being the first man to put the Salt Flats into the record books. The Flats practically became his obsession, and during the period between 1932 and 1950 he proved the potential of the area to the world.

Through the 30s he shared his enthusiasm with such men as John Cobb, George Eyston and Sir Malcolm Campbell. As one man set a record, others set out to break it. Often they succeeded. By the time World War II had started, John Cobb had set the land speed record at 369.7 miles per hour and Ab Jenkins held virtually all of the endurance records. Incidentally, most of Jenkin's records still stand today.

Once the war was over, a new racing concept was introduced to the Bonneville Salt Flats. It involved having drivers compete only against cars of their own class.

Before the war, racing had been almost entirely a matter of speed, and competition was confined to those who could design and build the most powerful cars. Wealth or the command of wealth had been essential to success.

Now hot rodders and racing enthusiasts from all over the world came to Bonneville to race the clock in efforts to set records for cars in their particular class.

Out of this came the Bonneville National's "Speed Trials" and "Speed Week" became one of amateur racing's most popular events. The Trials, which started in 1949, was sponsored by an organization known as Bonneville National's Inc.

But the World's Land Speed Record continued to motivate men to pit their machines against the clock. Year after year they keep coming back to Bonneville in the hope of becoming the one man who has gone faster than any other human has ever gone, and the years have added up a long series of successes and failures that have become a part of the legend of the Bonneville Salt Flats.

In 1947 John Cobb set a new land speed record of 394.2 miles per hour. That record stood for 16 years. Then in 1963 Craig Breedlove ushered in the era of jet power with his "Spirit of America". Through the mid-60s competition at the Flats reached a peak that had not been seen since the days of Ab Jenkins. The quest was still the same, but there was a new set of characters. Along with Breedlove, Walt Arfons with his "Wingfoot Express" and his brother Art with his "Green Monster" fought a see-saw battle for the record.

In November 1965 Breedlove set a record that would stand for five years when he drove his car at a speed of 600.601 miles per hour.

The decade of the 70s brought the dawn of the rocket-powered car. Gary Gabelich brought his rocket-powered "Blue Flame" to the Salt Flats in October, 1970 and set a new world's record of 622.407 miles per hour rather easily. That record still stands today. If the shades of Jedediah Smith, John Freemont or members of the Donnor-Reed Party were watching as he zipped over the salt at speeds of more than a mile in 5 seconds, they must have gasped with envy and awe.

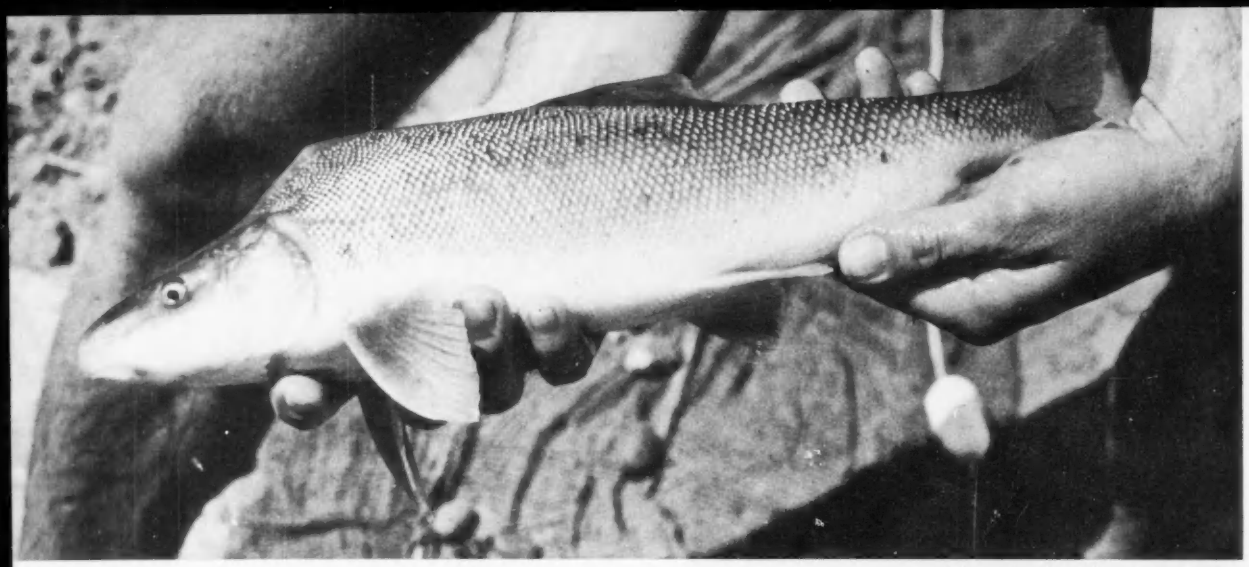
The history of the Bonneville Salt Flats has been varied and interesting; its future remains to be determined. The fame that has come from being ideal for a race course, may prove to be a dubious hold on the future. But men still look to the Flats as a testing area for their technology. Men will still come here to meet challenges like breaking the sound barrier, proving new machines and to venture into the frontier's of human endurance. But there are questions to be answered.

For example, is modern technology sophisticated enough to cope with the problems that will arise when land-bound vehicles travel at super-sonic speeds?

Then in an energy-short era, have speed records become a luxury we can no longer afford? An indication may lie in the fact that no one yet has made a serious challenge to Gabelich's 1970 world record.

Yet the Flats remain, a vast, stark, glaring white reality. As a barrier, it has yielded to the technology of speed, and because it is the kind of place it is, it has made significant contributions to that same technology.

Travelers still stop to gaze with awe when they first see it, then speed across its barren waste to find a more hospitable place somewhere else. Not so long ago men thought such desolate places were waste land waiting to yield to some new technology that would allow them to be settled and become profitable. Perhaps we have, at last, come to understand that the variety and difference such places give to our lives may be ample reason for their preservation. Then, who knows what values such places will assume in the future. For the present, BLM administers these public lands in the hope of preserving their unique characteristics for tomorrow's generations.



A humpback sucker, one species unique to the Colorado River system.

Endangered Fish of the Colorado

Changes in the Environment of the Colorado River Pose a Threat to Native Fishes.

NEIL B. ARMANTROUT
Moab, Utah District Office

The Colorado River begins as a cold, clear stream high above the timber line in the Rocky Mountains. Two thousand miles later, it dies in the sand at the head of the Gulf of California — a shallow, muddy, slow-moving stream that sinks into oblivion among the deposits left by centuries of erosion.

During its tumultious journey, the River passes through some of the most spectacular and rugged country in the world. From snowy Alpine meadows of the Continental Divide, it passes down steep mountain canyons and across the southwest desert as it winds it way to the sea. Where it crosses the Colorado Plateau, the river has gouged narrow canyons more than a mile deep into the bed rock.

Until recent times, the river has moved through these canyons in yearly cycles of spring flood to late summer drought. As melting snows and intense summer storms swept the barren slopes and neighboring deserts, tons of silt washed into the river, turning it into a muddy silt-laden torrent. Constricted within the narrow canyon walls, the stream plunged through many rapids and over falls.

It was a harsh environment and few living things could survive. Rapid changes in the flow, heavy loads of silt, extreme variations in temperature, and other highly unstable conditions provided an environment that most aquatic species could not adapt to. Few creatures from the outside were able to gain a foothold in the inhospitable canyons of the Colorado River System.

It is not surprising, then, that a highly indigenous fish fauna developed in the canyons of the Colorado. Over 70 percent of the native fish found in the river were found nowhere else in the world. A number of species developed unique physical forms, the most common being a curious hump behind the head. This hump was thought to help the fish stay on the bottom of the stream where currents were not so strong. Highly adaptive, these native fish were surprisingly abundant. Their feeding, spawning and other activities have become modified for life in the turbulent waters of the Colorado. Because of these modifications, these fish survive where others would perish.

Now the world in which these fish developed has changed. The first settlers moved into lands adjoining the river in the mid-1800s. At first, settlement was confined to the more hospitable lands on the upper reaches of the stream. It was not until John Wesley Powell made his epic journey in the years between 1869 and 1872 that all of the River was mapped. Since then cities have sprouted from the desert, dams have been built, and the waters

of the Colorado siphoned off and carried, via pipelines, for hundreds of miles to make possible the urban and agricultural development of the southwest.

The demands for water have changed the nature of the River. Overall flow has declined, leaving the remaining water higher in salts and sediments. The spring floods have been reduced or eliminated, and the old annual cycles of low water and high water are now a thing of the past.

Dams have now turned long stretches of the once raging river into quiet lakes. Below the dams, water flowing through the power turbines comes out so cold and clear that it is suitable for trout. But this is a far cry from the warm, silty water in which the native fishes thrived.

As the river changed, so did the fish. New species were introduced and thrived in the cooler, clearer water. Some native species, especially some of the suckers and smaller minnows, survived too, and even prospered, but there were four species that could not adapt to the new conditions. Two of these, the Colorado squawfish and the humpback chub, were among the first fish to be listed as endangered by the U.S. Fish and Wildlife Service. The other two have since been proposed for listing; the bonytail chub as an endangered species and the humpback sucker as threatened. Even before the Federal Government took action, several states along the Colorado River had acted to protect these once numerous fishes.

Fisheries biologists set a seine in an inventory of endangered fish in Green River's Desolation Canyon. The Green is a tributary of the Colorado River.

This stretch of the Green River is thought to have had the least change of any fisheries habitat in the Colorado River system.

Two of the four species were so numerous at one time that they supported an active fishery. The Colorado squawfish, the largest minnow in the United States, reached a length of six feet and weighed close to one hundred pounds. It was taken as a food fish and eaten fresh or smoked. Because it made migrations upstream, the early settlers called it the "Colorado River Salmon." It was considered an excellent food fish and supported a commercial fishery for many years.

While less prized by early settlers, the humpback sucker had a much longer history in the kitchen. From earliest times the Indians living in the canyon took the humpback sucker and made it an important item in their diet.

The bonytail and the humpback chub were not caught as often as the other two. In fact, the humpback chub was not described in scientific literature until well into the 20th century, and it was never abundant. The bonytail chub, once abundant, is now seldom taken anywhere in the river system. Its numbers have declined more than any of the other three species.

The four species have not only declined in numbers, but their distribution throughout their former range is now restricted. Recent studies show that these fish are now missing from most of their former range. Nowhere are they abundant. The largest populations are found in those areas of the river system where there has been the least change. This is mainly above the Glen Canyon Dam which is on the Utah-Arizona border.

The decline in population is due both to changes in the river and because of competition from

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Chuck McAda and Chuck Phillips seine for juvenile squawfish in Desolation Canyon under an endangered species contract issued by BLM.

other fish that have been introduced into the stream.

Without the annual cycle of flooding, high silt loads and high water temperatures, the native fishes do not spawn. Under natural conditions, these fish waited for floods to bring warm, silt-laden water into the stream before they started the physical processes that led to spawning. The quiet back-waters in flooded side canyons provided a safe place away from swift currents for spawning and for raising the newly hatched young.

Once the dams were built, there was a drastic drop in the temperature of the water and in the amount of silt carried by the river. The dams also checked the annual flooding. Thus the native fish missed the cues that caused them to spawn. In addition, backwater created by the annual floods either disappeared or was so drastically changed in character that the fish lost their spawning sites and a safe haven for their young.

Where backwater did exist, it was as often a trap as a safe rearing area. Irregular releases of water from the dams caused water levels to fluctuate as much as several feet in a single day. What seemed to be a safe spawning area one day became an isolated drying pool the next.

Few outside species could survive under the harsh conditions of the natural river. But once the dams were built, many new species found the changes in the river to their liking. Early settlers had introduced carp and channel catfish around the turn of the century. After the reservoirs were filled, game fish such as bass and perch were introduced and survived. Minnows brought to the river as bait escaped from fishermen's bait buckets and became established in the modified river. Today these minnows are the most numerous fish in the Colorado River. Native species find it hard to compete against such aggressive newcomers.

Only in those few isolated stretches of the system where conditions are little changed do the native species survive. Perhaps the least changed are portions of Desolation and Gray canyons of the Green River, a tributary of the Colorado. This is the only stretch of the entire river system where all of the four threatened and endangered species have been found in recent years.

In an arid land, water is life. The Colorado River and its tributaries are the only major source of water in a vast and thirsty land. Projects, dependent on water from the system, have been built, are being built, and are in the planning stage. Coal, oil, gas, oil shale and uranium, needed to help meet our energy needs, abound in the area. Their development requires large quantities of water. Major electrical generating plants, either built or proposed, will need large quanties of water. Furthermore, cities located in the area must look to the Colorado and its tributaries for the water needed to sustain continued growth.

As demands on the River have increased, so have efforts to protect the remaining canyons. Portions of the Colorado have been proposed for inclusion in the Wild and Scenic Rivers System, and parts of the Colorado and Green Rivers are now included within National Parks. Sportsmen, river floaters, naturalists and environmentalists see this as a unique aquatic habitat and prime recreational area that should be preserved in its natural state.

BLM is now involved in studies that will have an important bearing on the future of this canyonland area. BLM Districts along the Colorado and Green Rivers are studying the natural history, recreational uses and other resources of the river and its environs in cooperation with State and other Federal agencies.

Specialists from the cooperating agencies have formed into the "Colorado River Fishes Recovery Team" to protect and enhance the populations of threatened and endangered fishes in the River System. The team is preparing recovery plans to serve as guidelines to manage and protect the native populations.

Studies of fish, water quality, river habitat and the impact of man's intrusion are outlined in the plan. Much of the area is still not well known because of its lack of accessibility, but the demands being made on the river require a better understanding of its unique habitats. These studies are necessary if the native fish are to keep their tenuous hold in the canyons where they evolved. BLM will be involved in both the studies and in the final management program of this endangered resource.

Arizona's Wild Burros

Burros from Public Land Find Homes in Many States.

DALE KITE
Phoenix, Arizona District Office

Early prospectors brought the burro to the west as a beast of burden. Then when individual animals had outlived their usefulness, owners turned them loose in a wild and empty land to fend for themselves.

At the time, that wasn't so bad from the burro's point of view. Most of the west was public land and there was no one to dispute the burro's possession. Grass and other food was abundant, and since other owners were also turning their animals loose, companionship was not hard to come by. Furthermore, in the southern end of the Rocky Mountains the climate was mild. All across that part of the west, burro couples settled down to the burro's equivalent of married life. The result — little burros.

Wild burros quickly adjust their holding pens. Here they are fed, watered, and made ready for adoption.

Dave Ericsson eases out of the saddle after a hard morning's ride. Roundups were hard on cowboys and horses alike before a new Federal law allowed the Bureau to use helicopters in capture operations.

The trouble has been that the burros did too well. Today their numbers have increased until they are a threat to wildlife habitat and in danger of eating themselves out of house and home.

Yet attempts to control their numbers has set off a controversy that drowns out the discordant braying of the burro itself.

In Arizona, BLM administers more than 12½ million acres of public land and is responsible for programs having national significance, but nothing heats up such raw passions as the controversy generated by these inoffensive animals.

With the passage of the 1971 Wild Free-Roaming Horse and Burro Act, BLM and the Forest Service were charged with the protection and management of burros on land administered by the two agencies.

The Act provided for penalties of up to $2,000 and a year's imprisonment for capturing, killing or selling a wild horse or burro.

The burros were recognized as a part of the natural system within the ecology of the public lands. Under protection of the law, and since there are so few natural enemies, the animals have increased until an estimated 3,700 burros graze in Arizona and most of the areas they inhabit are now considered overpopulated.

The law provides three methods of keeping populations in check. They may be killed in a humane manner; removed to other areas of public lands that already have a burro population; or they may be rounded up and placed in the care of citizens who are willing and able to provide a home, (the so-called Adopt-a-Burro program.) Even humane killing is highly controversial, and the Bureau has avoided it wherever possible. Most areas having burro populations are now overpopulated or nearly so, so transfer to other areas offers no real hope. Roundup and adoption seems to offer the most acceptable solution.

Not everyone agrees with the Bureau's solution. A few would like to see more drastic action and a few of these would like to

It's the end of the line for this burro as Ben Fancher's noose settles over its head. The burro will now be placed in a foster home under the Bureau's Adopt-A-Burro program.

get in on the action themselves. One citizen writes, "Before these Federal marksmen take over in a burro hunt, why not open this to the sportsmen who pays the conservation bills by his licensing?"

Others offer similar solutions,

"We, the undersigned, request. . . every effort . . . to negotiate with France (to) purchase our burros. It is a well-known fact that France is purchasing horses from the United States for conversion to meat for their citizens . . ."

Still another citizen doesn't care how the burro population is reduced just so long as something is done promptly. He writes:

"Sirs, who can I call or write to . . . to get an effective burro control program — NOW!"

The opposite end of the spectrum of public opinion is represented by a vocal group of citizens who want no control at all. They believe the burro population would become self regulating through the natural cycles of abundance and famine if let alone. BLM biologists agree that such natural cycles do work after a fashion. But they point out that before a herd of animals can be reduced by starvation, they would do irreparable harm to the land and to the habitat that supports many other kinds of animal life. Since BLM is charged with managing the public land for the benefit of multiple resources and many users, the Bureau cannot afford for natural conditions to reduce the burro population.

The Adopt-a-Burro program offered a humane way of controlling the burro population, but BLM soon found that the program was easier to conceive than to execute. Rounding up burros proved time-consuming and expensive until the Federal Land Policy and Management Act gave the Bureau the authority to use helicopters in roundups.

Many were opposed to giving the Bureau the authority to use helicopters in wild horse and wild burro roundups. Aircraft and other motorized vehicles had played a prominent role in the capture and harassment of wild horses and burros in the days before the animals were protected by law. Many felt that the authority requested by BLM would lead to new abuses. BLM's answer was that roundups conducted by mounted riders was harder on wild herds, an abuse of the rider's mount and a real danger to the rider himself. Furthermore, roundups of wild horses and burros by men on horseback was woefully short on results. The number of animals so captured simply could not keep pace with the growing herds of wild horses and burros. The Bureau was convinced that it could make the helicopter effective without undue harassment of animals.

Since the authority has been granted, herds of both horses and burros have been gathered in roundup pens with even less fuss and bother than would have been expected in rounding up domestic herds by the old methods.

In the hands of a skillful pilot, a gentle but constant pressure is kept on the herd, so that the animals keep moving but rarely at more than a walk. The helicopter has enabled the Bureau to make

definite inroads into the problem of overpopulation at a favorable cost-benefit ratio.

Many of the Bureau's old critics now agree. In July 1977 the Bureau's Phoenix District Office asked for public comment concerning plans to gather burros in the Alamo Lake region about 60 miles south of Kingman, Arizona. In a letter the Arizona Humane Society offered the following comment,

". . . working with the Bureau of Land Management these many past months, studying and observing your methods, has led to our total endorsement of your procedures in handling animals."

Once the burros were in the holding pens, it became the Bureau's responsibility to find foster homes. The effort involved national publicity, the screening of applications and finally the nuts and bolts of getting the burro into the hands of its new keeper.

But who would want a burro? In a nation attuned to thinking in terms of the more elegant horse, the burro may seem to many something in the nature of a country cousin, a backwoods hick with little to recommend it to a prospective keeper.

But with burros, like country cousins, appearances may be deceiving. Experts say the burro is smarter than the horse, and those who get to know one find that they become affectionate pets. Then, those who bother to take a second look often find something appealing about the long ears, sad eyes and disheveled coat of fur.

On June 16, 1977 Andrew G. Mosby Jr., a 16-year-old Iowa farm boy adopted the first Arizona wild burro — a pregnant jennie. He also took a young jack for his younger sister. He reports that the jennie gave foal on June 27 and that the burros are adapting to their new home. The colt is already a pet.

Phoenix television crews learned that burros and children made a good public interest story, and a Walter Cronkite introduction to a story carried by the network was worth a thousand press releases.

Applications started to pour in. Some even came from Canada. Since the law requires the Federal Government to retain ownership of all animals placed in foster homes, those applications had to be turned down.

Many people traveled great distances to get their burros. Burros from the Phoenix District have now been placed in many states, and a large percentage of the owners traveled to Phoenix to pick up their animals.

One question in many minds was how a wild burro would behave under domestic conditions. Present experience seems to prove that they adapt to domestic status rather well. Most of those who have adopted burros have been enthusiastic with the results.

Mrs. Betty Pflug, who traveled from her home in Zelienople, Pennsylvania to get three burros for herself and to haul four more for other applicants, wrote,

"The jack has been the gentlest so far, "The children get on it, but we haven't had it out of the stall yet."

Kelli Hazlett, a 13-year-old Peoria, Arizona school girl, wanted a burro she could train to pull a cart. She must have had misgivings when she came to pick up her animal. Photographers wanted a picture of her and the burro together. BLM handlers put a halter on the burro so it could be posed.

The jennie protested this indignity by jumping out of the loading chute. But after a brisk tug of war with her handlers, she allowed herself to be backed into a fence and quieted down enough for Kelli to pet her and for the photographers to get their pictures.

"I haven't had a harness on her yet," Kelli later reported, "But I have ridden her four of five times."

"We get a lot of applications for jennies and young burros," Dean Durfee, a BLM employee in charge of the capture and adoption program for the Phoenix District, said recently, "but we don't know what is going to happen to the older jacks."

Durfee was especially concerned about one particular jack the BLM handlers had named "King Richard." King Richard was the first burro captured in the roundup and incidentally the oldest animal in the holding pen. Scarred from his years in the wild and wearing a perpetual look of irritation, this raunchy individual was anything but lovable. In the holding pen, King Richard lorded it over the other burros and was quick to punish any trespass on his royal prerogatives.

In light of his experience with most applicants, Durfee had grave doubts that he would be able to find a foster home for King Richard. Then a man from the "show me" State of Missouri came to pick out a dozen jennies and a jack. As he looked over the burros in the pen his eye fell on King Richard. The burro's uncompromising individuality struck a spark.

"That's the one I want," the Missourian said.

And that's the one he got.

More than 600 burros have been rounded up from the public lands in the Phoenix District. The public's response to the appeal for foster homes has exceeded all expectations and all burros in captivity have been placed in foster homes as of January 23.

The story of wild burros in the Phoenix District has had a happy ending.

Adopted Burros Find Gold in Florida

Two Baby Burros Fly to New Home in Suburban Miami

Jennifer Gold gets acquainted with one of her new charges at the Miami Airport. Captured on BLM land in California, the two baby burros were flown to their foster home in Florida.

JUDY LENT
Eastern States' Office

There was gold in the hills where wild burros once were the sturdy helpmates of western miners. And now there's gold in Florida, where two baby burros have captured the heart of their new guardian. With names reminiscent of California gold rush days, "Nugget and Dusty" are now at home with a whole family of Golds in Perrine, a suburb of Miami.

Last summer, Kenneth Gold read a *Wall Street Journal* story about a "horse of a different color. . .from Uncle Sam." His interest aroused, he called WHOA (Wild Horse Organized Assistance) in Reno, Nevada, and was quickly referred to the Bureau of Land Management.

The Gold family had a special reason for wanting to take advantage of BLM's unique program to "adopt" excess wild horses and burros from western public lands. That special reason is Jennifer, their twelve-year-old daughter who is also a victim of muscular dystrophy.

Jenni, as she is called, is a girl who loves all manner of beasts, as long as they are donkeys. . or burros. She had read extensively about them, collected small donkey figurines, and once had a real burro for a pet which later died. Around her neck she wears a silver donkey charm on a chain, a recent birthday gift from her dad.

But all that came before the spectacular arrival of her two new charges, with help from BLM, all the way from southern California.

When BLM received Gold's application, it was referred to Tami Kennedy, Burro Specialist for BLM's Riverside, California District, who immediately took a personal interest in the whole matter. At the time, she was coordinating roundup activities of over 300 burros at the Valley Wells Ranch near the East Mojave Desert.

Then, just as if it were planned all the time, two babies arrived—a jack and a jenny—at BLM's holding corrals. Both were unclaimed orphans in need of a home.

Soon arrangements were made to transport the babies by the quickest and most convenient method—airplane! Immediately, a series of events were set in motion, both East and West.

Beginning in California, BLM employees were caught up in the flurry of activity. The burros had to be bottle fed with special care. There were crates to be built and painted. Veterinary services and departure plans were needed, as well as press and photo coverage.

In Florida, the Golds had a fence to build, a shelter to install (in the form of a bright blue

In their new home, Nugget and Dusty contemplate a game of follow the leader.

Lunch time.

tent), and a truck to borrow for hauling.

At BLM's Eastern States Office in Maryland, still more activity was in progress. Arrival procedures and arrangements for newspaper, television and photo coverage were followed by a quick flight to Miami for a press briefing and interviews.

Meanwhile, two bewildered burros, by now a two-month-old jack and a three-week-old jenny, winged their way from Las Vegas to Miami.

Armed with carrot nuggets and heart-shaped apple treats, Jenni was wheeled right into the airport's baggage claim area to await delivery of the pink and blue crates. A sign "Please be careful with me, I'm only a baby" on each crate cautioned airline personnel as they opened them. The little jenny, with a pink bow around her neck, came out first onto the slippery airport floor. When jack was to join her, he immediately headed in another direction. So back into his crate he went. BLM's instructions for baby burro care were attached to one crate, while special bottle nipples were tucked inside the other.

"I'm just going to love them and take care of them," Jenni repeated in response to all questions. "I really wanted them," she added, "especially when I heard they were orphans." Her perpetual smile radiated her delight as media representatives pressed closer and cameras flashed.

Jenni's parents and sisters, Vicki 19 and Becki 16, were on hand, too, each sharing in the excitement. And a large audience of travelers soon gathered around.

Jenni now has more than a handful as "mother" of two burros. The names, Nugget and Dusty, were chosen as reminders of California gold, and because they are now truly members of a Gold family. Even after a month at their new home, both were still bottle fed. Jenni particularly enjoys the time spent feeding her pets, so she's "keeping them babies" for awhile longer. Nugget and Dustry love Jenni, too. Readily trailing her electric wheelchair around the yard, they continually vie for her attention. particularly when food is on their mind.

Home is where the heart is; and this delightful girl has plenty of room in her heart to give Nugget and Dusty a good home, and lots of love.

The story of Jenni, Nugget and Dusty focuses attention on BLM's national effort to find homes for excess wild horses and burros from western rangelands. Several hundred burros have been gathered in California and Arizona where special efforts have been needed to place them in the adopted care of qualified guardians. Anyone with the space and the desire to have one or more of these animals can apply by writing to "Adopt-a-Horse or Burro," Bureau of Land Management, Building 50, Federal Center, Denver, Colorado 80225.

These trees, planted under the short-lived Timber Culture Act, are among the few surviving groves left in the west.

THE LAST TREE CLAIM

A Unique Cottonwood Grove in Moffat County, Colorado is Living Reminder of the Short-Lived Timber Culture Act.

OLGA CURTIS
Reprinted from Denver Post's Empire Magazine

To strangers driving on Colorado 13 and 789 south of Craig, Iles Grove probably looks like just a big bunch of trees by the side of the road.

The grove is big indeed - five acres of densely planted 75-foot-tall cottonwoods. It makes an impressive sight against the otherwise treeless hills in the area.

But Iles Grove is also a unique part of Colorado history: According to experts at the U.S. Bureau of Land Management (BLM), this is the last identifiable "tree claim" in the state.

Nearly a century ago, Thomas H. Iles planted those cottonwoods to acquire extra land for his homestead under the short-lived Timber Culture Act.

That law, passed by the U.S. Congress in 1873 "to encourage the Growth of Timber on the Western Prairies," offered a homesteader 16 acres of free land for every acre of trees he planted.

Before the law was repealed in 1891, more than 10 million "tree claim" applications were filed in the West. But only about 13 per cent of the applicants ever gained any land. Trees were hard to grow in the semi-arid West, and the rules were stringent: The homesteader had to plant at least one acre of trees, no more than 12 feet apart each way, to earn 16 acres of land, and he had to keep those trees alive in "good thrifty condition" for three years.

In Colorado, for example, of the 27,864 "tree claim" permits to plant issued by the General Land Office, only 3,789 received final certificates of approval.

Thomas Hallowell Iles, who received his permit to plant in 1885, failed on his first try at tree cultivation, but succeeded on his second in 1890.

Iles was a notable northwest Colorado pioneer. Born in Kentucky in 1854, he studied agriculture at Ames College in Iowa (now Iowa State University) before coming to Denver as a schoolteacher at age 20.

In 1874 Iles homesteaded 160 acres south of Craig, the start of what was to become a 3,000-acre cattle ranch.

Iles, who was elected to the Colorado Senate in 1913, died in 1926. His name remains on a small mountain near the trees he planted and also on the rich oil field known as Iles Dome, a rounded bluff clearly visible from the edge of the grove.

Iles probably remembered his agricultural studies when he managed to make five acres of cottonwoods grow in dry grass country. His daughter-in-law, Mrs. George V. Iles of Denver, who came to the Iles ranch as a bride in 1915, recalls that Iles often told the story of his successful "tree claim."

He cut masses of wild cottonwood branches, notched them and laid them lengthwise in furrows he had plowed 10 feet apart. Then, using creek water he had diverted to a ditch, he flooded the furrows.

Iles' trees grew, while similar plantings in the area failed. Presumably the flooding turned the trick; Colorado was suffering a drought in 1890.

The Iles family retained the ranch property until 1948, when it was sold to a ranching neighbor. By then, Iles Grove had acquired a special status:

"There are so few trees anywhere else in the area," Mrs. George Iles explains, "that the grove is pretty much sacred."

The new owner kept the grove intact, and Mr. and Mrs. Farrest Loper, who bought the ranch in 1961, have done the same.

"We weed out the dead trees," says Mrs. Loper. "But we would never cut down the living trees."

If you want to visit Iles Grove, and think you might miss five acres of 75-foot-tall cottonwoods sticking out like a sore thumb on a bare horizon, look for a "roadside table" sign about 20 miles south of Craig. Highways 13 and 789 cut through the edge of the grove, and you can picnic in cool shade on the eastern side of the road.

At the very beginning of the grove on the other side stands a 6-foot granite memorial to Iles, put up by his widow soon after his death.

The monument says: "In memory of Thomas Hallowell Iles, pioneer of northwestern Colorado since 1874." There is no mention of the trees, and there is no other marker in the vicinity to tell visitors the history of Iles Grove and what makes it unique.

With more than 3,000 successful "tree claims" on record in Colorado, it may seem odd that only Iles Grove has survived as a separate entity.

Thomas H. Iles rests under the shade of trees he planted to get additional land for his homestead.

Alvah Q. Whitledge of the BLM office in Denver, an expert on old land patents, explains that most other "tree claims" died, were trimmed or cut down by time and development. Some others blended into the landscape, so they can no longer be identified.

But Iles Grove has been documented from the time of Iles' first permit. Probably because the land has had only three owners in more than a century, the trees are intact, standing exactly where they were planted.

"We would be delighted to find out identifiable 'tree claims' in the state," says Whitledge. "They are a fascinating part of Western history.

"But Iles Grove is the only one we know."

The Rash Plans of Western Frontiersmen Threatened to Plunge the Young Nation into a European War.

THREAT OF FILIBUSTER

PAUL HERNDON
Office of Public Affairs

To the Westerner, the alliance of England and Spain against France was an unholy alliance of the two powers of darkness who had done most to endanger his life and ruin the Western economy. In addition to the many settlers who had come from across the mountains, there was a large population of French still living in the Mississippi River valley. In 1937 they outnumbered the Spanish. Almost to a man, they thought of themselves as citizens of France awaiting the day when their country would deliver them from the yoke of foreign domination.

To all westerners — American and French alike — the neutralist policies of the Washington administration were an abomination. The thought of keeping the nation out of war was just short of laughable west of the mountains. In so far as the west was concerned, the Revolution had never ended. The settlers had lived in a state of constant warfare since 1775.

Furthermore, the westerner was a man who believed in direct action. He had no understanding of, nor cared about the finesse of international diplomacy. One westerner who believed that direct action would solve most of the problems of the west was the "old red-head" George Rogers Clark. Clark had long nursed injured feelings and considered himself a victim of ingratitude and negelect. It was his victories that had firmly established the American claim to land beyond the Appalachian Mountains. Yet his repeated claim for a just recompense had been ignored by both Virginia and the Federal Government.

At the same time, Clark's bitter enemy, James Wilkinson had attentive audiences in both Richmond and Philadelphia. Wilkinson, who was not worthy to tie the laces of Clark's shoes, soon became the enemy of any man whose popularity or power threatened his own preeminence.

Clark was popular on the frontier, so Wilkinson set about mounting a letter-writing campaign directing hints and accusations against Clark to public figures in both Richmond and Philadelphia. As a result, Clark's reputation was in decline in those capitols, but the red-head was still a man to be reckoned with west of the Allegheneys.

Now, in 1793, with the Mississippi River closed to western commerce and with the Spanish encouraging Indian raids on all of the settlements south of the Ohio, Clark decided that he was the only man who could save the West.

His plan was simple. He would raise a force of men, and float down the Mississippi River. Along the way, he would gather additional forces from the many French settlements along the river. Altogether, they would sweep the Spanish from the mouth of the Mississippi River and reestablish the French Empire in Louisiana.

With no thought of guile, the old soldier set about to gather support for his project, writing letters to prominent men whose blessing he wanted or needed. One letter was addressed to the French Ambassador to the United States.

France's help during the Revolution had not been forgotten and many Americans were rabid pro-French. These welcomed Clark's plan. They had long urged Washington to enter the war on the side of the French. Now they saw what Clark could not see, that, either with or without the sanction of the United States government, his action would surely draw the nation into a war with both England and Spain. Washington saw it too and was horrified. All of his forebearance and patience in keeping the young republic from becoming involved in a European war was about to be torpedoed by the dreamings of a rash frontiersman.

The news of Clark's activities reached Washington while he was at Mount Vernon. He immediately set out for Philadelphia where he called a meeting of his cabinet. Within the cabinet only Henry Knox and Alexander Hamilton were opposed to allowing Clark to carry out his plan. The debate between Hamilton and Jefferson was especially bitter.

Washington ruled against the advice of the majority of his cabinet and issued a proclamation on April 22, 1793 calling on all citizens to remain neutral toward all waring European powers.

On that same day, Washington received word that France's new ambassador to the United States

had arrived in Charleston, South Carolina. His name was Citizen Edmund Genet. He was coming to the United States for the express purpose of getting the country involved in the war as an ally of France.

The loss of Canada and the Mississippi River valley during the French and Indian War had been a bitter blow to French pride. At no time since that war had France abandoned her dream of an American Empire. the reconquest of its American possessions was one issue on which the Monarchy and the Revolutionary Government were in agreement and now the Revolutionary forces were anxious to prove that they could regain what the monarchy had lost.

Citizen Genet's landing in Charleston was a happy accident of fate. His ship had been blown off course, and now it became necessary for him to travel overland from Charleston to Philadelphia. Never one to miss an opportunity, Citizen Genet made his journey a march of triumph to rally American citizens to the cause of France.

As he traveled north large crowds of French sympathizers gathered in every town to bid him welcome. By the time he reached Philadelphia, Genet was convinced that he could become the moving force in American affairs.

In Philadelphia, Genet found Clark's letter outlining his plan to attack the Spanish in Louisiana. It was just the kind of project that Genet had hoped for, and he immediately sent spys to encourage Clark and to assure him that France supported the plan. But Genet had overplayed his hand.

Washington was livid, and even Jefferson, who had been the strongest advocate of intervention, was offended by the meddling of the Ambassador. Feeling that his position had been compromised, Jefferson resigned from the cabinet and Washington asked France to recall Ambassador Genet.

Washington's demand for the recall of Genet reached Paris at a time when the Government was having second thoughts about getting involved in an American campaign. Reverses on the Continent had forced the nation to commit all her resources there. Acceding to Washington's demand, France recalled Genet and sent a new ambassador to replace him.

The withdrawal of France's approval of his plans to attack Spanish positions in Louisiana, did little to discourage Clark. He still enjoyed the full support of the people of Kentucky including its Territorial Governor Isaac Shelby. He went ahead with his planning.

On January 25, 1974, he placed advertisements in western newspapers calling for volunteers. Each man who joined the expedition was promised 2,000 acres of Spanish lands and the lawful plunder of war equally divided.

Washington intensified his efforts to stop Clark. On March 24 he issued another proclamation calling on Clark and his volunteers to desist. On March 31 Secretary of War Knox ordered General Wayne to use military force to prevent Clark and his men from passing down the Ohio River. In June Congress finally passed legislation making it a crime for a citizen of the United States to engage in hostile acts against any foreign power not at war with the United States.

In New Orleans, Spanish officials were frantic. For years dreams of an American invasion had been their constant nightmare. Now it appeared a certain reality. Governor Carondelet had been kept informed of Clark's progress by none other than Agent No. 13, James Wilkinson. Carondelet reinforced Spanish garrisons along the river and pleaded with Wilkinson to revive secessionist sympathies among the western settlers.

Wayne's victory at Fallen Timbers brought an end to Clark's plans for a southern campaign, and it also brought an immediate and drastic change in Spanish attitudes. Thomas Pickney, the United States Ambassador to Spain, was able to negotiate a treaty to open the Mississippi River to American commerce and to settle long disputed boundaries between the two nations. In the Treaty of San Lorenzo el Real, Spain ceded all land north of the 31st parallel, including the city and district of Natchez to the United States.

However, the Treaty did not immediately change anything in the Natchez district. A Spanish garrison continued to administer the fort, and the Spanish Governor continued to enforce Spanish laws in the town and countryside.

In New Orleans, Governor Carondelet refused to recognize the loss of Spanish claims to territory north of the 31st parallel. He believed that the secession of the western settlements was imminent and that the entire Mississippi Valley was about to fall into Spanish hands. He appealed to James Wilkinson to "become the Washington of the West" and lead the settlers into the Spanish fold.

Wilkinson was starting to have worries of his own. When Wayne marched against the Indians Wilkinson had been appointed second in command. With his usual passion for intrigue, he had started one of his letter-writing campaigns to undermine his Commanding General. Wayne's complete victory had aborted any hopes Wilkinson had of having him removed from command. He had also made some dedicated enemies, including Wayne himself, who would have liked nothing better than to see Wilkinson's downfall.

Yet luck continued to ride Wilkinson's horse. Wayne lived only a short time after the battle, and Wilkinson became the Commanding General of the United State's Army. With so much to lose, Wilkinson now worried about being exposed as a traitor.

In Philadelphia, Washington was coming to the end of his term of office. His patience was wearing thin over Spain's procrastination in relinquishing control of the Natchez District. He was also hearing disturbing rumors about Wilkinson. He selected Andrew Ellicott, as the man to go to Natchez to expedite Spain's withdrawal from the town. While explaining to Ellicott his duties, Washington warned him to keep a wary eye on Wilkinson.

Reaction among the residents of Natchez was mixed as Ellicott approached. The many American sympathizers were delighted and they formed militia units to facilitate the American occupation. The old loyalist, Anthony Hutchins, now in his eighties, was frustrated. He had heard rumors about a British invasion, and he had hoped to unfurl the Cross of St. George to welcome them. Now the occupation by the Americans seemed a hopeless complication.

Down in New Orleans, Governor Carondelet was livid. He threatened to shoot Ellicott and his soldiers and hang the American sympathizers in the Natchez District.

During the months that followed there were a series of confrontations between Ellicott and his men and the Spanish authorities that took on an aspect of comic opera. But fortunately, threats and gestures took the place of bloodshed, and slowly the Spanish were forced to give ground. In March of 1798 they finally withdrew from the district, and the American flag was raised over the town.

Ellicott's final responsibility was to survey and mark the boundary along the 31st parallel. He marked it well. His men cut a wide swath through the forest and swamps in sweltering heat. Trees and brush were winnowed into great heaps and burned. It was a clear and definate boundary, but as fate would have it, it served for only a few short years. In 1803 the United States bought all of Louisiana and Ellicott's swath through the forest was no longer a boundary between nations.

Public Land Sales

No public land tracts were scheduled for sale at the time this issue went to press.

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BUREAU OF LAND MANAGEMENT

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Phoenix, AZ 85073

CALIFORNIA:
Federal Building, Room E-2841
2800 Cottage Way
Sacramento, CA 95825

COLORADO:
Colorado State Bank Building
1600 Broadway
Denver, CO 80202

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Silver Spring, MD 20910

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Boise, ID 83724

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Reno, NV 89509

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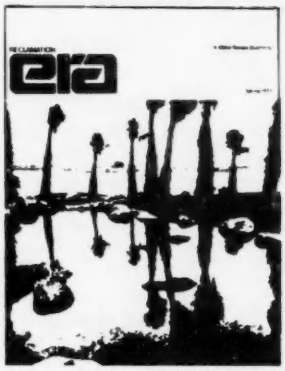

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